

**REMARKS**

Claims 10, 12, 14 and 16-24 have been examined on their merits.

Applicant herein editorially amends claims 10, 12, 14, 16 and 17 to correct an antecedent basis error. Per the following discussion, the editorial amendments to claims 10, 12, 14, 16 and 17 were not made for reasons of patentability.

Claims 10, 12, 14 and 16-24 are all the claims presently pending in the application.

1. Claims 10 and 18-24 stand rejected under 35 U.S.C. § 102(e) as allegedly being unpatentable over Bilgic *et al.* (U.S. Patent No. 5,884,148). Applicant traverses the rejection of claims 10 and 18-24 for at least the reasons discussed below.

To support a conclusion that a claimed invention lacks novelty under 35 U.S.C. § 102, a single source must teach all of the elements of a claim. *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1379, 231 U.S.P.Q. 81, 90 (Fed. Cir. 1986). A claim is anticipated only if each and every element as set forth in the claim is found either expressly or inherently in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). A single source must disclose all of the claimed elements arranged as in the claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). A proper anticipation rejection requires that every element of the claim be found “in a single prior art reference.” *See In re Robertston*, 169 F.3d 743, 745, 49 U.S.P.Q.2d 1949, 1950 (Fed. Cir. 1999). For anticipation to exist, there must be no difference between the claimed invention and the reference disclosure, as that reference would be

understood by one of ordinary skill in the art. *See Scripps Clinic & Research Found. v. Genentech, Inc.*, 927 F.2d 1565, 1576, 18 U.S.P.Q.2d 1001, 1010 (Fed. Cir 1991); *see also, Crown Operations Intn'l, Ltd. v. Solutia, Inc.*, 289 F.3d 1367, 62 U.S.P.Q.2d 1917 (Fed. Cir. 2002). Further, “an anticipating reference must describe the [claimed] subject matter with sufficient clarity and detail to establish that the subject matter existed and that its existence was recognized by persons of ordinary skill in the field of the invention.” *ATD Corp. v. Lydall, Inc.*, 159 F.3d 534, 545, 48 U.S.P.Q.2d 1321, 1328 (Fed. Cir. 1998) (citing *In re Spada*, 911 F.2d 705, 708, 15 U.S.P.Q.2d 1655, 1657 (Fed. Cir. 1990)). Rejections under 35 U.S.C. § 102 are proper only when the claimed subject matter is identically disclosed or described in the prior art. Thus, the cited reference must clearly and unequivocally disclose every element and limitation of the claimed invention.

*Bilgic et al.* fail to teach or suggest at least the transmission of a dialing signal through the base station to the base station control each time the dialing signal is generated, as recited in claim 10. As discussed previously, *Bilgic et al.* disclose, *inter alia*, that dialing signals, such as DTMF tone signals or pulse signals, are generated by the telephone or CPE. *See, e.g.*, col. 9, lines 1-4 of *Bilgic et al.* The base station stores the dialed signals (the numbers dialed) and formats them appropriately according to the numbering plan of the locality in which the base station is situated. *See* col. 9, lines 42-46; col. 11, lines 38-48; Fig. 3, steps 311-320 of *Bilgic et al.* Once all of the numbers have been dialed, the base station inserts the entire string of numbers at a call setup message that transmits all of the numbers at once to the base station controller. *See* col. 12, lines 49-55; Fig. 4A, service request message 420, DTAP message 432 of *Bilgic et*

*al.* In other words, the base station sends all of the dialing signals to the base station controller together at one time.<sup>1</sup> Figure 4A of Bilgic *et al.* clearly shows that all the dialed numbers are collected in the base station, and are not sent to the base station controller as each digit on a keypad is pushed. See, e.g., shaded area 409 of Fig. 4A. The digit transmission of the dialed numbers to the base station is depicted by shaded region 415 of Figure 4 of Bilgic *et al.* In either case, Bilgic *et al.* fail to teach or suggest the transmission of dialing signals (as each digit on a keypad is pressed) from a telephone set to a base station control station. In contrast, the invention recited in claim 10 transmits each dialing signal that generated by pressing a digit on a keypad to a base station control station through a base station.

Based on the foregoing reasons, Applicant submits that Bilgic *et al.* fail to teach or suggest all of the claimed elements as arranged in claim 10. Therefore, under *Hybritech* and *Richardson*, Bilgic *et al.* clearly cannot anticipate the present invention as recited in independent claim 10. Thus, Applicant submits that claim 10 is allowable, and further submits that claims 18-24 are allowable as well, at least by virtue of their dependency from claim 10. Applicant respectfully requests that the Patent Office withdraw the § 102(b) rejection of claims 10 and 18-24.

---

<sup>1</sup> “In response to receiving the DTAP Setup message from the URC 104, the *base station 112 inserts into the DTAP Setup message the dialed numbers previously collected from the URC and stored in local memory 742*, and then sends a Transport message 432 comprising the DTAP Setup message to the base station controller 113, as reflected in steps 326 and 327 of FIG. 3.” Bilgic *et al.*, col. 12, lines 49-55 (emphasis added).

2. Claims 12, 14, 16 and 17 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Bilgic *et al.* in view of Suonvieri (U.S. Patent No. 6,047,181). Applicant traverses the rejection of claims 12, 14, 16 and 17 at least for the reasons discussed below.

The Patent Office acknowledges that Bilgic *et al.* do not disclose or suggest a base station control station comprising means for deciding whether a dialing signal represents a final digit of a dialed telephone number or not. The Patent Office suggests that Suonvieri allegedly discloses the subject matter to overcome the acknowledged deficiencies of Bilgic *et al.*

With respect to claims 12, 14, 16 and 17, the combination of Bilgic *et al.* and Suonvieri fail to teach or suggest at least the transmission of dialing signals to a telephone exchange or a base station control station as each dialing signal is generated. Bilgic *et al.* disclose, *inter alia*, that dialing signals, such as DTMF tone signals or pulse signals, are generated by the telephone or CPE. *See, e.g.*, col. 9, lines 1-4 of Bilgic *et al.* The base station stores the dialed signals (the numbers dialed) and formats them appropriately according to the numbering plan of the locality in which the base station is situated. *See* col. 9, lines 42-46; col. 11, lines 38-48; Fig. 3, steps 311-320 of Bilgic *et al.* Once all of the numbers have been dialed, the base station inserts the entire string of numbers at a call setup message that transmits all of the numbers at once to the base station controller. *See* col. 12, lines 49-55; Fig. 4A, service request message 420, DTAP message 432 of Bilgic *et al.* Figure 4A of Bilgic *et al.* clearly shows that all the dialed numbers are collected in the base station, and are not sent to the base station controller as each digit on a keypad is pushed. *See, e.g.*, shaded area 409 of Fig. 4A. The digit transmission of the dialed numbers to the base station is depicted by shaded region 415 of Figure 4 of Bilgic *et al.* In other

words, the base station sends all of the dialing signals to the base station controller together at one time.<sup>2</sup>

The combination of Suonvieri and Bilgic *et al.* fails to overcome the fundamental deficiencies of Bilgic *et al.*, in that Suonvieri does not discuss, and does not at all relate to the manner of transmission of dialing signals among different parts of a radio communications system. For instance, the Patent Office's citation to Suonvieri (col. 5, lines 19-39) does not relate to deciding whether a dialing signal represents a final digit of a dialed telephone number, as the claims require. Rather, Suonvieri describes how the dynamic changing of timing advance ranges in and among cells in a cellular telephone network can be done by either the base station or the base station controller. *See* col. 5, lines 31-38 of Suonvieri. In sum, Suonvieri is totally unrelated to deciding whether a dialing signal represents a final digit of a dialed telephone number.

Moreover, the combination of Bilgic *et al.* and Suonvieri fails to teach or suggest the transmission of each dialing signal as it is generated to a base station control station or an exchange, as recited in claims 12, 14, 16 and 17. As noted earlier, the Patent Office argues that Bilgic *et al.* discloses that single digits are sent. However, it is abundantly clear that the base station inserts the entire string of numbers at a call setup message that transmits all of the

---

<sup>2</sup> "In response to receiving the DTAP Setup message from the URC 104, the *base station 112 inserts into the DTAP Setup message the dialed numbers previously collected from the URC and stored in local memory 742*, and then sends a Transport message 432 comprising the DTAP Setup message to the base station controller 113, as reflected in steps 326 and 327 of FIG. 3." Bilgic *et al.*, col. 12, lines 49-55 (emphasis added).

numbers at once to the base station controller. *See* col. 12, lines 49-55; Fig. 4A, regions 409 and 415, service request message 420 of Bilgic *et al.* Moreover, the invention recited in claims 12, 14, 16 and 17 transmits the dialing signals to the base station control station/exchange as they are dialed; that fundamental deficiency of the combination of Bilgic *et al.* and Suonvieri is never addressed in the Patent Office's rejection analysis for claims 12, 14, 16 and 17. Thus, Applicant submits that the Patent Office cannot fulfill the "all limitations" prong of a *prima facie* case of obviousness, as required by *In re Vaeck*, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991).

Applicant submits that one of skill in the art would not be motivated to combine the references, because the two references disclose unrelated technologies and lack features of the invention recited in claims 12, 14, 16 and 17. For example, Bilgic *et al.* is directed to connecting a standard non-wireless device with a wireless system, while providing flexibility with respect to the telephone numbering scheme and dialing signal analysis of the systems geographic location. *See* col. 2, lines 29-36 of Bilgic *et al.* In contrast, Suonvieri relates to intracell capacity allocation and intracell handover in conventional cellular telephone systems. *See* col. 1, lines 11-14 of Suonvieri. There is no overlap in the teachings of the inventions of these references, and no suggestion in either reference that would provide the motivation to combine the references. In particular, the invention of Suonvieri has no need for connecting a standard non-wireless device with a wireless system, because it relates solely to connecting conventional wireless devices together. Thus, Applicant submits that the Patent Office cannot fulfill the motivation prong of a *prima facie* case of obviousness, as required by *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999) and *In re Zurko*, 258 F.3d 1379, 1386 (Fed. Cir. 2001).

AMENDMENT UNDER 37 C.F.R. § 1.111  
U.S. APPLN. NO. 09/298,910  
ATTORNEY DOCKET NO. Q54131

Based on the foregoing reasons, Applicant submits that the combination of Bilgic *et al.* and Suonvieri fails to disclose all of the claimed elements as arranged in claims 12, 14, 16 and 17. Therefore, the combination of Bilgic *et al.* and Suonvieri clearly cannot render the present invention obvious as recited in claims 12, 14, 16 and 17. Thus, Applicant submits that claims 12, 14, 16 and 17 are allowable, and requests that the Patent Office withdraw the § 103(a) rejection of claims 12, 14, 16 and 17.


In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE  
**23373**  
CUSTOMER NUMBER

  
Paul J. Wilson  
Registration No. 45,879

Date: December 2, 2004